

# Ising Model

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**Abstract.** A serial and parallelizable algorithms for the Ising model are presented. The differences in these algorithms are compared while varying several simulation parameters.

## 1 Introduction

### 1.1 Ising Model

### 1.2 Metropolis Algorithm

### 1.3 Single-Flip

### 1.4 Multi-Flip

## 2 Methods

## 3 Results

## 4 Conclusion

## References

1. Example, F., Ekeland, I.: Nonlinear oscillations and boundary-value problems for Hamiltonian systems. Arch. Rat. Mech. Anal. 78, 315–333 (1982)